

AMENDMENTS TO THE CLAIMS:

This listing of claims will replace all prior versions, and listings of claims in the application:

LISTING OF CLAIMS:

1-16 (canceled)

17. (new) An information recording medium comprising a plurality of recording layers to record therein information, wherein at least one of the plurality of recording layers has a management information area to record therein recording condition information which indicates an optimum recording condition at each of recordable speeds when the information is recorded.

18. (new) The information recording medium according to claim 17, wherein recording speed information which indicates the recordable speed for each of the plurality of recording layers is recorded in the management information area.

19. (new) The information recording medium according to claim 18, wherein the recording condition information for each of the plurality of recording layers is recorded in the management information area, correspondingly to the recording speed information.

20. (new) The information recording medium according to claim 19, wherein a table on which the recording speed information and the recording condition information are registered for each of the plurality of recording layers, and which has an index, is recorded in the management information area.

21. (new) The information recording medium according to claim 17, wherein identification information for identifying said information recording medium is recorded in the management information area.

22. (new) The information recording medium according to claim 17, wherein the recording condition information is at least partially recorded from the beginning of production of said information recording medium, as pre-information of said information recording medium.

23. (new) The information recording medium according to claim 17, wherein the recording condition information is at least partially recorded or updated, as written-once or rewritable information.

24. (new) The information recording medium according to claim 17, wherein the management information area is disposed nearer an inner circumference in a top layer out of the plurality of recording layers, and includes a portion in which the recording condition information with respect to the plurality of recording layers is collectively recorded.

25. (new) The information recording medium according to claim 17, wherein the management information area is disposed in each of the recording layers.

26. (new) The information recording medium according to claim 17, wherein the recording speed information is defined to indicate a higher speed in an upper layer side out of the plurality of recording layers.

27. (new) An information recording apparatus for recording information onto an information recording medium comprising a

plurality of recording layers to record therein the information, wherein at least one of the plurality of recording layers has a management information area to record therein recording condition information which indicates an optimum recording condition at each of recordable speeds when the information is recorded,

said information recording apparatus comprising:

a reading device for reading the recording condition information from the management information area;

a recording speed setting device for setting a recording speed corresponding to a recording target layer in which the information is to be recorded, on the basis of the read recording condition information; and

a recording device for recording the information into the recording target layer at the set recording speed.

28. (new) The information recording apparatus according to claim 27, wherein

recording speed information which indicates the recordable speed for each of the recording layers is recorded in the management information area, and the recording condition information for each of the recording layers is recorded, correspondingly to the recording speed information, and

said recording speed setting device sets the recording speed and the optimum recording condition corresponding to the recording target layer, on the basis of the recording speed information and the recording condition information.

29. (new) The information recording apparatus according to claim 27, wherein

recording speed information which indicates the recordable speed for each of the recording layers is recorded in the management information area,

said information recording apparatus further comprises a storing

device in which the recording condition information which indicates an optimum recording condition for each of a plurality of recordable maximum speeds is registered,  
 said reading device reads the recording speed information from the management information area, and  
 said recording speed setting device sets the recording speed and the optimum recording condition, on the basis of (i) the read recording speed information and (ii) a recording condition information which corresponds to the read recording speed information, out of the recording condition information which is registered in said storing device.

30. (new) The information recording apparatus according to claim 27, wherein

identification information for identifying said information recording medium is recorded in the management information area,  
 said information recording apparatus further comprises a storing device in which (i) recording speed information which indicates the recordable speed and (ii) the recording condition information which indicates an optimum recording condition for each of a plurality of recordable maximum speeds are registered, for each identification information for identifying respective one of a plurality of information recording media,  
 said reading device reads the identification information from the management information area, and  
 said recording speed setting device sets the recording speed and the optimum recording condition, on the basis of a recording speed and a optimum recording condition which correspond to the read identification information, out of the recording speed information and the recording condition information which are registered in said storing device.

31. (new) An information recording method of recording information onto an information recording medium comprising a plurality of

recording layers to record therein the information, wherein at least one of the plurality of recording layers has a management information area to record therein recording condition information which indicates an optimum recording condition at each of recordable speeds when the information is recorded,

said information recording method comprising:

a reading process of reading the recording condition information from the management information area;

a recording speed setting process of setting a recording speed corresponding to a recording target layer in which the information is to be recorded, on the basis of the read recording condition information; and

a recording process of recording the information into the recording target layer at the set recording speed.

32. (new) The information recording medium according to claim 17, wherein the recording condition information includes strategy information.

33. (new) The information recording medium according to claim 17, wherein the recording condition information includes optimum power information of laser for recording.